Appl. No. 10/787,062 Attorney Docket No. 81880.0115 Amdt. Dated January 29, 2007 Customer No.: 26021

Reply to Office Action of September 27, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Currently amended): An artificial knee joint which comprises a femoral component to be secured to a distal portion of a femur and a tibia component to be secured to a proximal portion of a tibia, comprising an inner a medial sliding surface and an outer a lateral sliding surface for receiving a load of the femoral component at the tibia component, wherein the inner medial sliding surface is formed in a sectional shape of circular arc at the front anterior and rear posterior side(s) in the front to back anterior-to-posterior direction thereof, while the outer lateral sliding surface is formed in a sectional shape of circular arc at the front anterior side and in a sectional shape of linear at the rear posterior side(s) in the front-to-back anterior-to-posterior direction thereof, wherein the anterior side of the medial sliding surface makes a circular arc having a curvature radius R₁ at a longitudinal section and the posterior side makes a circular arc having a curvature radius R₂, wherein R₁ < R₂.
- (Currently amended): An artificial knee joint according to claim
 [[1]] 4, wherein a middle portion of the inner medial sliding surface of the tibia component is formed in a linear sectional shape in the front-to-back anterior-to-posterior direction.

Appl. No. 10/787,062 Attorney Docket No. 81880.0115 Amdt. Dated January 29, 2007 Customer No.: 26021

Reply to Office Action of September 27, 2006

longitudinal direction thereof.

3. (Currently amended): An artificial knee joint according to claim [[1]] 4, wherein the euter <u>lateral</u> sliding surface of the tibia component is formed in a sectional shape of circular arc in a direction orthogonal to the <u>front-to-back anterior-to-posterior</u> direction thereof, and a curvature radius of the circular arc is gradually increased from the <u>front anterior</u> side to the <u>rear posterior</u> side in the

4. (New): An artificial knee joint which comprises a femoral

component to be secured to a distal portion of a femur and a tibia component to be secured to a proximal portion of a tibia, comprising a medial sliding surface and en

a lateral sliding surface for receiving a load of the femoral component at the tibia

component, wherein the medial sliding surface is formed in a sectional shape of circular arc portion at the anterior and posterior side(s) in the anterior-to-posterior

direction thereof, while the lateral sliding surface is formed in a sectional shape of circular arc portion at the anterior side and in a sectional shape of linear portion at

the posterior side(s) in the anterior-to-posterior direction thereof, wherein an

anterior edge of the sectional circular arc portion at the anterior side of the lateral

sliding surface is positioned at the femoral component side to an extending line from the linear portion at the posterior side(s) in the anterior-to-posterior direction

thereof.

5. (New) An artificial knee joint according to claim 4, wherein an anterior

edge of the sectional circular arc portion at the anterior side of the lateral sliding surface is positioned at a closer level to the femoral component side than that of a

posterior edge of the linear portion at the posterior side(s) in the anterior-to-

posterior direction thereof.

Appl. No. 10/787,062 Attorney Docket No. 81880.0115 Amdt. Dated January 29, 2007 Customer No.: 26021

Reply to Office Action of September 27, 2006

6. (New) An artificial knee joint according to claim 4, wherein the tibia component is composed of a tray member and a sliding member that has the medial sliding surface and the lateral sliding surface, and an anterior edge thickness of the sliding member at the anterior side of the lateral sliding surface is larger than that of a posterior edge thickness of the sliding member at the posterior side of the lateral sliding surface in the anterior-to-posterior direction thereof.

- (New) An artificial knee joint according to claim 4, wherein the circular
 arc portion at the anterior side of the lateral sliding surface is a concave face to the
 femoral component in the anterior-to-posterior direction thereof.
- 8. (New) An artificial knee joint according to claim 4, wherein the circular arc portion at the anterior side of the lateral sliding surface is a concave face to the femoral component and is connected to the linear portion in the anterior-to-posterior direction thereof.
- (New) An artificial knee joint according to claim 1, wherein the anterior side in the lateral sliding surface makes a circular arc having a curvature R1 at a longitudinal section.